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Sensitive Plant and Animal Field Guide Area IV



SENSITIVE PLANT AND ANIMAL FIELD GUIDE
FOR
AREA IV

by

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and Bernard L. Kovalchik 1/

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Pacific Northwest Region
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Sensitive Animals: Arranged Here and
in Text Alphabetically

BIRDS:

- | | |
|-----------------------|----------------------------|
| 1. Bald eagle | (Haliaeetus leucocephalus) |
| 2. Ferruginous Hawk | (Buteo regalis) |
| 3. Long-billed curlew | (Numenius americanus) |
| 4. Peregrine falcon | (Falco peregrinus) |
| 5. Snowy plover | (Charadrius alexandrinus) |
| 6. Spotted owl | (Strix occidentalis) |
| 7. Swainson's Hawk | (Buteo swainsonii) |

MAMMALS:

- | | |
|--------------|---------------|
| 1. Wolverine | (Gulo luscus) |
|--------------|---------------|

INTRODUCTION

This field guide has been developed as an aid for Forest Service personnel in Area IV to identify Sensitive Plant and Animal Species recognized by Region 6 of the USDA Forest Service. All enclosed plates represent only those plant and animal species that have documented occurrence either on the Deschutes, Fremont, Ochoco, or Winema National Forests. A complete check-list of sensitive plants can be found in the Appendix showing both those species with documented occurrence in Area IV and species that are suspected to occur on one or more of the four National Forests comprising Area IV.

Each section of this guide will be arranged by probable plant community (habitat) a given plant or animal species will most likely occur in. The following sections will be used as a general index to species:

FORESTED HABITATS:

Wet Habitats (seeps, springs, bogs, and streamsides)

Mesic Habitat (mixed conifer woodlands)

Dry Habitats (ponderosa pine or lodgepole pine stands and may be a savanna)

Rocky Forested Slopes, Talus

NONFORESTED HABITATS:

Wet Meadow

Moist Meadow

Dry Meadows

Sagebrush/Steppe

Scablands, Dry Rocky Slopes

Ponds, Lakes, Streams

ALPINE HABITATS

Moist or Dry Meadows, Streambanks, Lake Margins

Wet or Dry Cliffs, Rocky Slopes, Talus

The user is cautioned not to reference only one section of this guide but anticipate that given plant or animal species may range over a variety of related plant communities. Exact limits of listed plant and animal species are mostly unknown. Contiguous plant communities offer potential habitats for a number of species. For example, a species found in or using a meadow setting may range into the nearby forest edge, or a species found in a dry ponderosa pine community could be anticipated to occur in either sagebrush/steppe or even scabland communities. However, it is unlikely that a species can be found over a range of unrelated communities such as alpine habitats and downslope dry habitats.

SENSITIVE PLANTS LISTED BY PROBABLE HABITATS

FORESTED HABITATS:

Wet Habitats including seeps, springs, bogs,
and streamides:

Mimulus tricolor
Vaccinium oxycoccus var. *intermedium*
Lobelia dortmanna
Sarcodes sanguinea
Lycopodium annotinum

Mesic Habitats (mixed conifer woodlands):

Asarum caudatum var. *viridiflorum*
Nama lobbii (disturbed sites)
Penstemon peckii
Cypripedium montanum
Erythronium klamathense
Lycopodium annotinum
Hemitomes congestum

Dry Habitats (ponderosa pine or lodgepole pine
stands or exhibiting a savanna):

Eriogonum prociduum
Mimulus jepsonii
Penstemon glaucinus (high elevation)
Astragalus tegetarioides
Penstemon peckii
Castilleja chlorotica (high elevation)
Cypripedium montanum
Agoseris elata
Ranunculus andersonii
Sarcodes sanguinea

Rocky Forested Slopes, Talus:

Dicentra formosa ssp. *oregana*

NONFORESTED HABITATS:

Wet Meadow:

Botrychium simplex

NONFORESTED HABITATS CONTINUED:

Moist Meadow:

Perideridia erythrorhiza
Botrychium simplex
Allium madidum

Dry Meadow:

Perideridia erythrorhiza
Silene nuda ssp. *insectivora*
Penstemon peckii
Calochortus longebarbartus
 var. *longebarbartus*
Calochortus longebarbartus
 var. *peckii*
Allium campanulatum
Botrychium simplex
Agoseris elata

Sagebrush/Steppe, Juniper-Sagebrush/Steppe:

Astragalus peckii
Astragalus howellii var. *howellii*
Lupinus cusickii ssp. *brachypodus*
Lomatium peckianum

Scablands, Dry Rocky Slopes:

Allium bisceptrum
Ranunculus andersonii
Oryzopsis hendersonii
Collomia macrocalyx

Ponds, Lakes, Streams:

Lobelia dortmanna
Salix bebbiana

SUB-ALPINE, ALPINE HABITATS:

Moist or Dry Meadows, Streambanks, Lake Margins:

Hieracium bolanderi
Calamagrostis breweri
Gentiana newberryi

SUB-ALPINE, ALPINE HABITATS CONTINUED:

Wet or Dry Cliffs, Rocky Slopes, Talus:

Claytonia umbellata
Collomia mazama
Elmera racemosa var. puberulenta
Melica stricta
Allium platycaule
Aster gormanii
Erigeron cascadensis
Hieracium bolanderi
Arnica viscosa
Allium campanulatum
Smelowskia ovalis var. ovalis
Arabis suffrutescens var. horizontalis
Draba aureola
Botrychium pumicola
Silene suksdorfii

SENSITIVE ANIMALS LISTED BY PROBABLE HABITAT

FORESTED HABITATS:

Mixed conifer old growth:

Spotted owl
Bald eagle

Ponderosa pine:

Bald eagle

Bluffs, Steep Escarpments:

Peregrine falcon

NONFORESTED HABITATS:

Marsh and Alkine flats:

Snowy plover
Long-billed curlew

Shrub/Steppe and Meadowlands:

Ferruginous hawk

Swainson's hawk

Peregrine falcon

HIGH ELEVATION, SUB-ALPINE, ALPINE:

Wolverine

Mimulus tricolor

Scrophulariaceae

Three-Colored Monkeyflower

Figwort Family

Annual, to up 1.5 dm tall; single to multi-stemmed, glandular puberulent.

Leaves entire or irregularly toothed, up to 4 cm long and 1 cm broad.

Flowers with short stalks; calyx glandular-puberulent; corolla principally purple, with a dark spot on each lobe, conspicuously marked in the throat with white and distally yellow, 3-5 cm long.

PHENOLOGY: Flowers June-July

HABITAT: Wet clay soils, vernal ponds, or adjacent to streams.

LOCATION AND YEAR COLLECTED: Fremont NF, 1982; Winema NF, 1982

MANAGEMENT: Small statured annuals sensitive to trampling.





Mimulus tricolor

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Vaccinium oxycoccos var.
intermedium

Swamp Cranberry

Ericaceae

Heath Family

Creeping shrub with very slender, glabrous to finely hairy stems, rooting at nodes.

Leaves persistent, thick, and leathery, 7-15 mm long, scattered along stem.

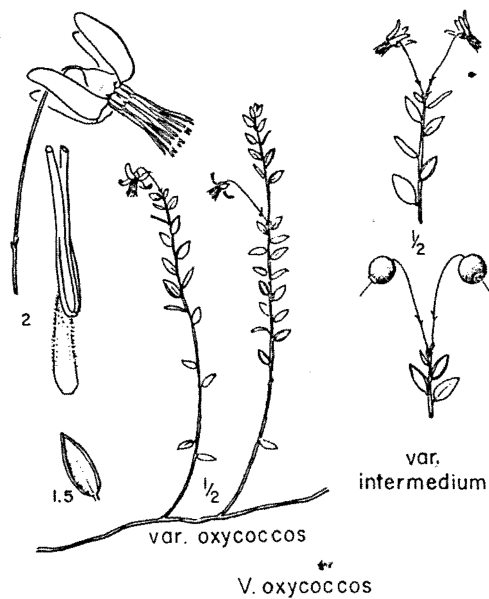
Flowers on puberulent pedicles, pale pink, terminal, solitary or in clusters, petals 6-8 mm long; calyx rounded or acutish; berry dark red, 7-10 mm in diameter.

PHENOLOGY: Flowers June-August; Fruits September-October

HABITAT: Sphagnum bogs at moderate to high elevation in mountains.

LOCATION AND YEAR COLLECTED: Deschutes NF, 1981





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Lobelia dortmanna

Campanulaceae

Water Lobelia

Harebell Family

Fibrous-rooted aquatic perennial, glabrous throughout, up to 1 m tall.

Stem hollow, upright, and mostly unbranched.

Leaves in basal rosette, linear, fleshy, hollow, somewhat curved, 2-8 cm long; stem leaves few and very small.

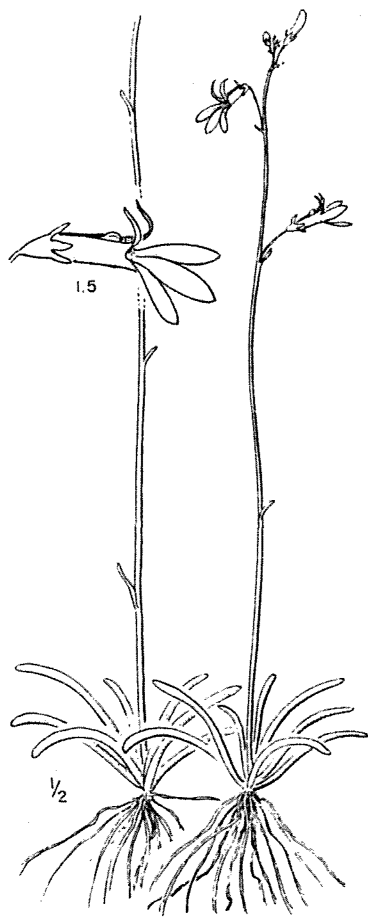
Flowers few and well spaced, pale blue or white, 1-2 cm long, lower lip hairy at base and as long as tube; capsule 5-10 mm long and 3-5 mm wide.

PHENOLOGY: Flowers June-August

HABITAT: In shallow water at the margins of lakes and ponds.

LOCATION AND YEAR COLLECTED: Deschutes NF, no year indicated.

NO PHOTO
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Lobelia dortmanna

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Sarcodes sanguinea

Ericaceae

Snow Plant

Heath Family

Stem stout, 2-6 dm tall, often slightly decumbent at base, arising from a thick mat of roots.

Leaves 2-3 cm long with hairs on margin.

Flowers longer than calyx, bright red, glabrous; capsule somewhat flat and round, 5-lobed, 1-2 cm broad.

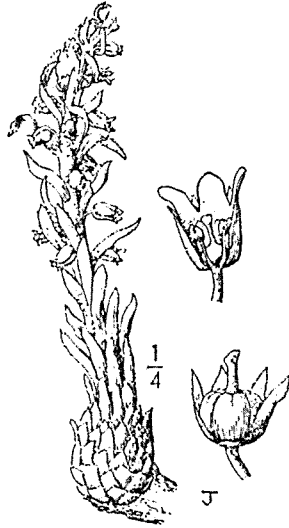
PHENOLOGY: Flowers May-June

HABITAT: Coniferous forest and along streams.

LOCATION AND YEAR COLLECTED: Fremont NF, 1982

MANAGEMENT: Apparent disjunct species from south-western Oregon, growing over a wide range of site; can tolerate moderate disturbance.





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Lycopodium annotinum

Lycopodiaceae

Stiff-Club Moss

Clubmoss Family

Perennial, non-flowering, evergreen, herbaceous plant with elongate main stem, prostrate or arching, irregularly rooting.

Prostrate main stem giving rise to scattered simple or few-branched, more or less erect leafy branches up to 2.5 dm tall.

Leaves many, crowded, in 8 ranks, firm, shiny, with fine tips, those on main stem serrulate.

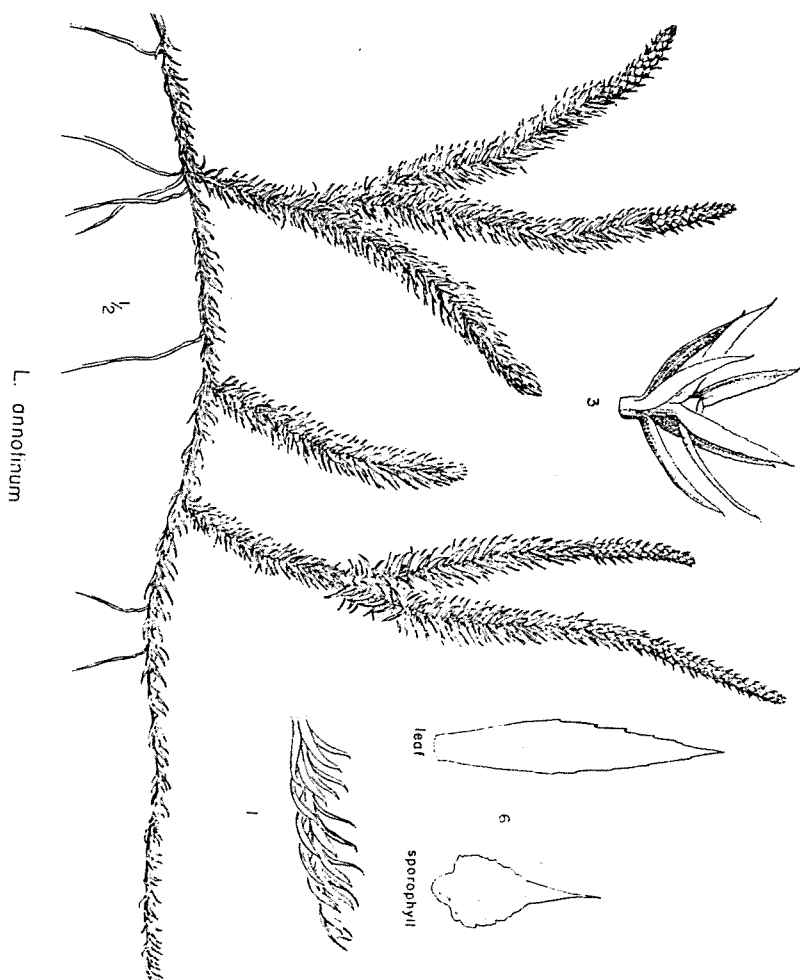
Nonflowering, fern related plant, reproducing by spores borne in cones up to 3.5 cm long on tip of erect branches.

PHENOLOGY: Sporulates in mid-summer

HABITAT: Usually in moist coniferous woods, occasionally on more open, rocky slopes at or below timberline.

LOCATION AND YEAR COLLECTED: Deschutes NF, 1981





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Asarum caudatum var.
viridiflorum
Green-Flowered Wild Ginger

Aristolochiaceae
Birthwort Family

Low growing perennial forming large mats; rootstocks extensive and aromatic when crushed, up to 2.5 dm tall.

Leaves 2 per node, petiole glabrous to hairy, blades cordate-reniform 4-10 cm long and up to 15 cm broad. Flowers greenish-white, the lobes long acute-attenuate; calyx brownish-purple to yellowish or greenish-yellow.

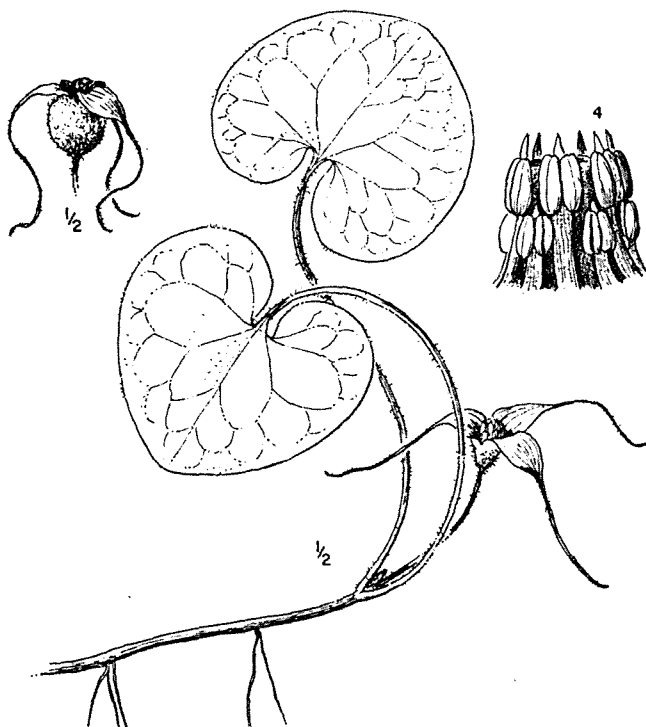
PHENOLOGY: Flowers April-July

HABITAT: Moist shaded mixed conifer woodlands.

LOCATION AND YEAR COLLECTED: Winema NF, 1982

MANAGEMENT: Severe site disturbance detrimental to somewhat shallow rooted plants.





Asarum caudatum

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Nama lobbii

Hydrophyllaceae

Lobb's Nama

Waterleaf Family

Low woody, leafy perennial up to 3 dm tall, matted wooly hairs and glandular.

Leaf-blades linear-oblong, 1-6.5 cm broad, entire with abundant gray matted hairs beneath, short or sessile.

Flowers numerous in compact, leafy-bracted terminal heads; calyx lobes linear-subulate, 3-7 mm long;

corolla purple, broadly funnel-shaped 9-11 mm long, 6-8 mm broad; capsule round, 3 mm long.

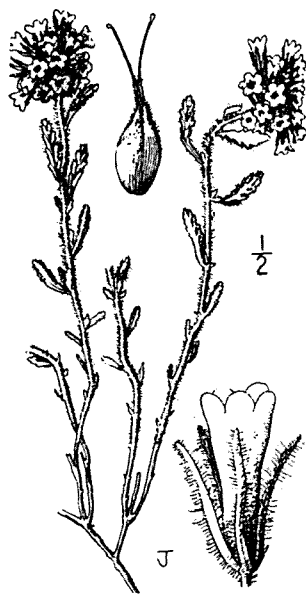
PHENOLOGY: Flowers June-September

HABITAT: Sandy or rocky soils in areas of past disturbance such as roadsides.

LOCATION AND YEAR COLLECTED: Winema NF, 1982

MANAGEMENT: Populations prefer highly disturbed areas.





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Penstemon peckii

Scrophulariaceae

Peck's Penstemon

Figwort Family

Tufted perennial from slender, woody rhizome-caudex, up to 7 dm tall.

Stems slender, glabrous below the glandular-hairy inflorescence, or the stem slightly hairy.

Leaves numerous, entire, linear or nearly so, up to 7 cm long and 5 mm wide, all or nearly all on the upright stem.

Flowers, glandular-hairy, pale purplish to white, 8-10 mm long, the tube narrow, only 2-3 mm wide at mouth, inside bearded; calyx 2-3.5 mm long, segments abruptly pointed.

PHENOLOGY: Flowers June-August

HABITAT: Dry ashy soils, commonly with ponderosa and larch.

LOCATION AND YEAR COLLECTED: Deschutes NF, 1980

MANAGEMENT: Some level of disturbance beneficial to population.





P. peckii

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Cypripedium montanum

Orchidaceae

Mountain Lady's Slipper

Orchid Family

Perennial up to 6 dm tall, glandular-pubescent and leafy throughout.

Leaves 5-15 cm long and to 7 cm broad, somewhat glandular-pubescent, sessile and sheathing the stem. Flowers usually 2, petals light to rather deep brownish-purple, lip pouched, dull white to purplish-tinged.

PHENOLOGY: Flowers May-early June

HABITAT: Dry to fairly moist, open to shrub- or forest-covered valleys.

LOCATION AND YEAR COLLECTED: Fremont NF, 1980; Ochoco NF, 1980; Winema NF, 1931

MANAGEMENT: Can withstand limited disturbance; avoid collecting.

Plants closely associated with stable setting.



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Cypripedium montanum

Erythronium klamathense

Liliaceae

Klamath Fawn-Lily

Lily Family

Perennial, flowering stems up to 7 cm tall, glabrous. Leaves broadly lance shape, not mottled, 7-15 cm long. Flowers often singular, occasionally 2-several flowered, the outer half or more white, basal portion yellow.

PHENOLOGY: Flowers July-August

HABITAT: Open mixed conifer woodlands.

LOCATION AND YEAR COLLECTED: Winema NF, 1982

MANAGEMENT: Severe site disturbance must be avoided; plants favor semi-shade.





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Hemitomes congestum

Ericaceae

Gnome Plant

Heath Family

Stems 0.5-2.4 dm tall, fleshy.

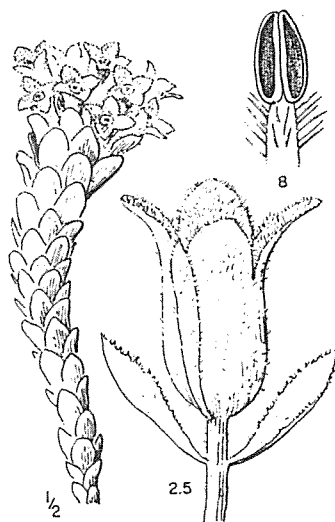
Calyx and corolla similar in color and texture, pinkish when fresh, drying to brownish; capsule round and covered with hairs.

PHENOLOGY: Flowers June-August

HABITAT: In deep humus, under conifers ranging from low to mid-elevation.

LOCATION AND YEAR COLLECTED: Deschutes NF, 1982





Hemitomes congestum

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Eriogonum prociduum

Polygonaceae

Prostrate Buckwheat

Buckwheat Family

Low matted perennial from a woody caudex, stems simple up to 8 cm tall.

Leaves basal, persistent, 4-10 mm long, 2-4 mm broad, white tomentose on both surfaces.

Flowers in terminal heads 1-1.5 cm across; bracts scale-like flowers yellow with reddish brown midribs, 2-2.4 mm long.

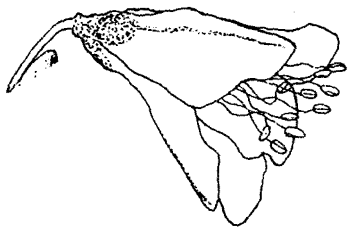
PHENOLOGY: Flowers May-August

HABITAT: Basalt flows on low elevation slopes and hills with ponderosa pine, sagebrush, and juniper.

LOCATION AND YEAR COLLECTED: Fremont NF, 1980

MANAGEMENT: Flowering heads often grazed; trampling of matted plants detrimental.





Mimulus jepsonii

Scrophulariaceae

Jepson's Monkey-Flower

Figwort Family

Annual, minutely glandular-pubescent, up to 10 cm tall.

Stems simple and freely branched above.

Leaves remotely placed or distally clustered, entire, long-lance shaped.

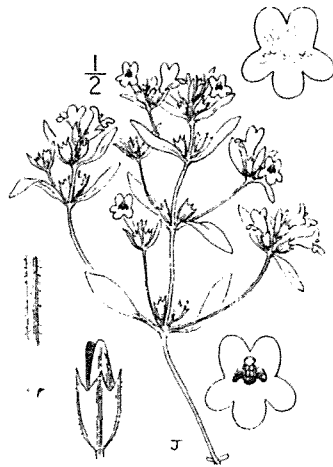
Flowers 9-12 mm long, dull purple, some pubescence on inside and bottom with 2 yellow ridges with dark purple spots; mature calyx 4-5 mm long, ridge-angled with ridge being green and pubescent with intervening surface pale and nearly glabrous.

PHENOLOGY: Flowers June-August

HABITAT: Bare gravelly or sandy soil in coniferous forest.

LOCATION AND
YEAR COLLECTED:
Deschutes NF,
1954;
Winema NF,
1966

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Astragalus tegetarioides

Leguminosae

Deschutes Milkvetch

Pea Family

Tufted, perennial with grayish appressed hairs, forming mats up to 4 dm in diameter.

Freely branching stems up to 5 cm tall.

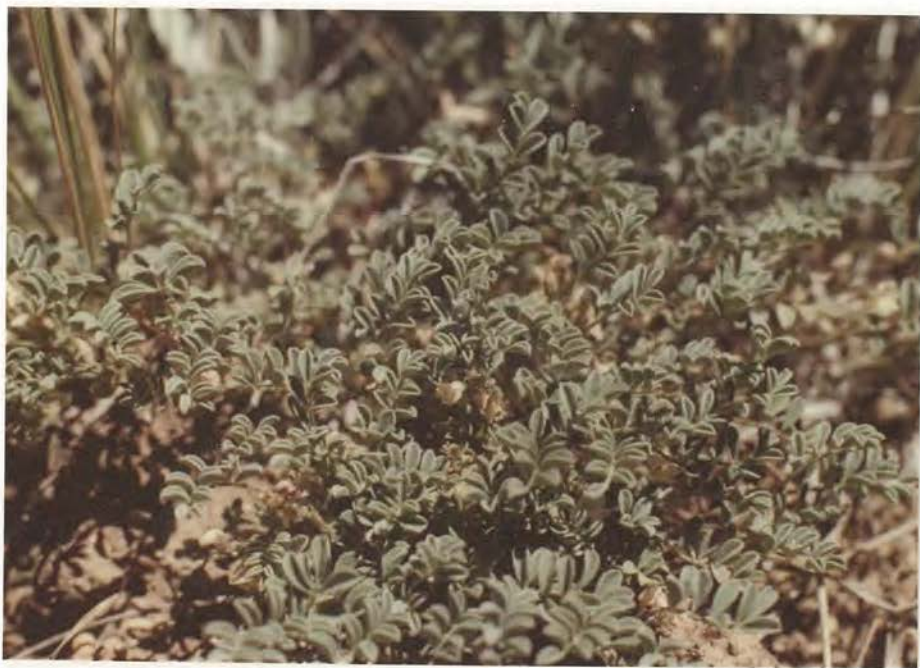
Leaves 2-4 cm long, stipules membranous with lower ones 3-5 mm long; leaflets 7-11 per compound leaf, leaflets 3-6 mm long, 2-4 mm broad.

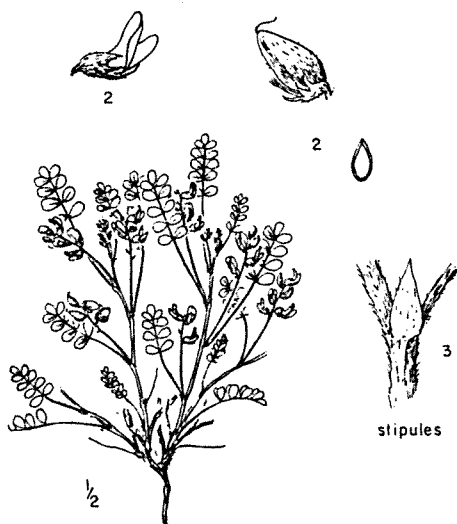
Flowers 3-7, about 4-6 mm long borne in loose racemes, corolla whitish, the strongly arched banner purplish-lined, keel purple-tinged.

PHENOLOGY: Flowers July-August

HABITAT: Chiefly in ponderosa pine forests.

LOCATION AND YEAR COLLECTED: Deschutes NF, 1976





A. tegetarioides

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Penstemon glaucinus

Scrophulariaceae

Blue-Leaved Penstemon

Figwort Family

Perennial, up to 3-3.5 dm tall, herbage waxy coated. Leaves thickish, the basal 2-6 cm long including the slender petiole, 7-13 mm wide.

Flowers blue-purple, 12-15 mm long, inside moderately bearded with yellow hairs; calyx 3.5-6 mm high.

PHENOLOGY: Flowers in July

HABITAT: Gearhart Wilderness and near Campbell Lake, Fremont NF; found in high elevation lodgepole pine and white fir forests.

LOCATION AND YEAR COLLECTED: Fremont NF, 1980

MANAGEMENT: Avoid areas where plants abundant.





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Castilleja chlorotica

Scrophulariaceae

Green-Tinged Paintbrush

Figwort Family

Perennial with fine glandular-pubescent throughout, up to 2 dm tall.

Stems many in a clump. Leaves lance shaped, entire or the upper with a pair of lobes.

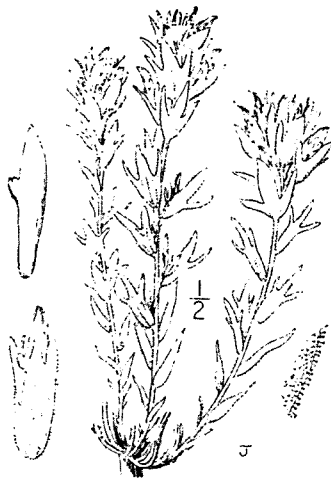
Bracts and calyx distally yellowish, bracts strongly trilobed; corolla 16-18 mm long, slightly exceeding the calyx, main central part of flower (galea) 9 mm long, green, thick.

PHENOLOGY: Flowers June-August

HABITAT: Moderate elevation in mountains and flat to gently sloping ground with sagebrush.

LOCATION AND YEAR COLLECTED: Fremont NF, 1980; Deschutes NF, 1980





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Agoseris elata

Compositae

Tall Agoseris

Sunflower Family

Perennial latex producing herb; up to 7 dm tall. No hairs except on bracts below flower. Leaves 10-30 cm wide, entire or more or less deeply cut.

Stems ending in a single, yellow dandelion-like flower; achene body about 8-10 mm long, slender beak about equal length.

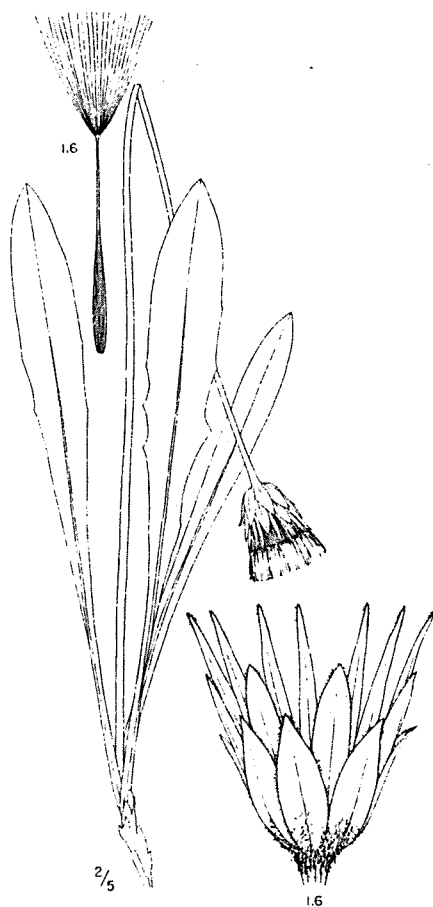
PHENOLOGY: Flowers June-July

HABITAT: Meadows and open woods, from valleys to moderate elevation.

LOCATION AND YEAR COLLECTED: Deschutes NF, 1980

MANAGEMENT: Limited distribution on known sites, areas usually grazed.





A. elata

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Ranunculus andersonii

Ranunculaceae

Anderson's Buttercup

Buttercup Family

Perennial, glabrous, slightly glaucous, up to 1.5 dm tall, with fibrous roots.

Stem (scape) usually with single flower and leafless, occasionally 2-flowered and the lower flower with a small dissected leafy structure below.

Flowers with 5 red petals 10-20 mm long; sepals 5, enclosing outside of petals, glabrous, greenish but strongly reddish or purplish-tinged, 7-10 mm long.

Leaves long-petiolate, blades 2-4 cm long and at least as broad, dissected into 3 leaflets each of which dissected again 2-4 times into linear segments 0.5-2 mm broad.

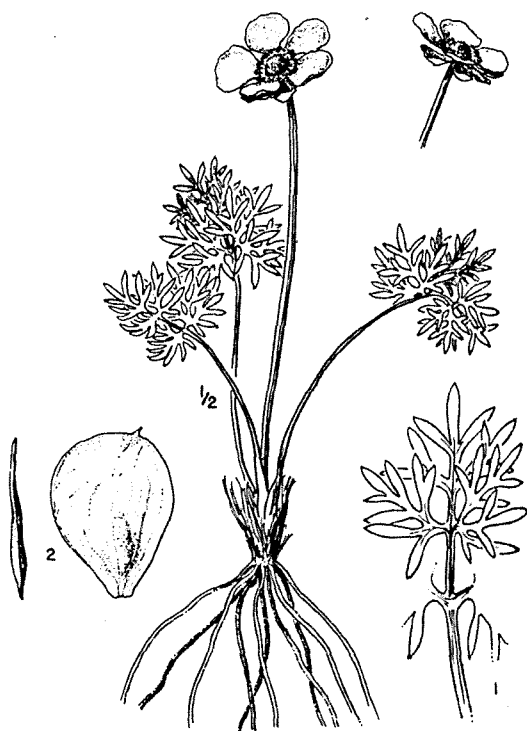
PHENOLOGY: Flowers April-June

HABITAT: Sagebrush valleys and ponderosa pine forest.

LOCATION AND YEAR COLLECTED: Fremont NF, 1980;

Ochoco NF, 1976





R. andersomii

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Dicentra formosa ssp.
oregana

Oregon *Dicentra*

Fumariaceae

Fumitory Family

Perennial from brittle rhizome; foliage somewhat waxy coated; up to 3 dm tall.

Stems (scapes) unbranched below several flowered panicle.

Leaves basal, numerous with long-petioles and only slightly shorter than the scape, the blades divided in 3's up to 3-4 times.

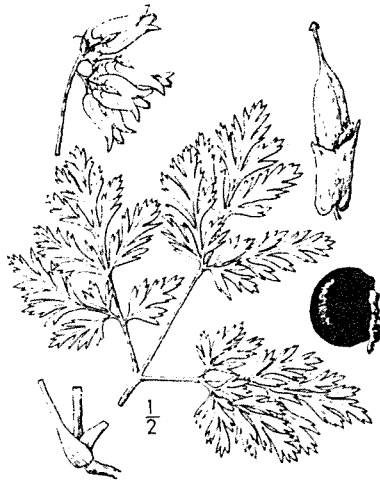
Flowers yellowish-white, 15 mm long, tips of the outer petals yellow, spreading, those of the inner rose-colored. Capsule 12 mm long, seeds black and shiny.

PHENOLOGY: Flowers April-June

HABITAT: Rocky forested slopes or talus slopes at mid-elevations.

LOCATION AND YEAR COLLECTED: Winema NF, 1982





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Botrychium simplex

Ophioglossaceae

Little Grape-Fern

Adder's-Tongue
Family

Perennial, up to 15 cm tall, glabrous throughout. Sterile blade on an evident sheathing petiole mostly 2.5 cm long, the blade itself up to about 4 cm long and 3 cm wide with 2-4 pairs of pinnae, the lowest pair largest.

Nonflowering plant, reproduces by spores on an erect fertile stalk up to 8 cm long.

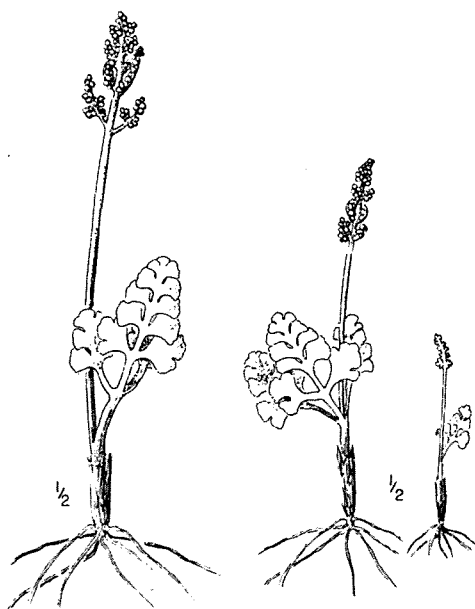
PHENOLOGY: Sporulates July-August

HABITAT: Moist to rather dry meadows at mid-elevation in the mountains.

LOCATION AND YEAR COLLECTED: Fremont NF, 1976; Ochoco NF, 1982.

MANAGEMENT: Can withstand fairly severe grazing due to low stature.





B. simplex

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Perideridia erythrorhiza

Umbelliferae

Red-Root Yampah

Parsely Family

Perennial, up to 8 dm tall, from a group of several spindly shaped, rose to chestnut brown tuberous roots.

Basal leaves ovate, 10-20 cm long, 5-10 cm broad, simply pinnate with 3 to 7 pairs of narrow pinnae, stem leaves pinnate or divided by 3's.

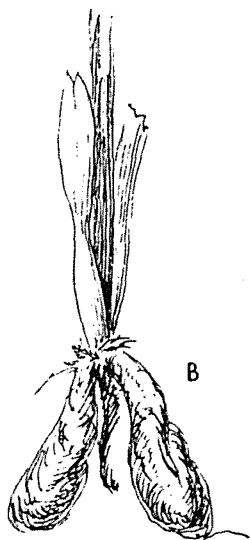
Flowers whitish, spatulate or narrowly obovate, 1.8 mm long, 1 mm broad; calyx teeth evident, fruit ellipsoid, 4-7 mm long, 3.5 mm broad.

PHENOLOGY: Flowers July-August

HABITAT: Moist grasslands, valleys, and pasturelands, often in heavy, poorly drained soils.

LOCATION AND
YEAR COLLECTED:
Winema NF, 1965

NO PHOTO
AVAILABLE



Allium madidum

Liliaceae

Swamp Onion

Lily Family

Perennial with two fleshy leaves arising from round clustered bulbs. Larger bulbs usually with a cluster of easily detached bulbets at one side, inner coats whitish or pinkish. Leaves concave-convex in cross section, 1-4 mm broad, entire and about as long as the flowering scape.

Scape 1-2 dm tall, slender, terete or nearly so, sometimes ridged.

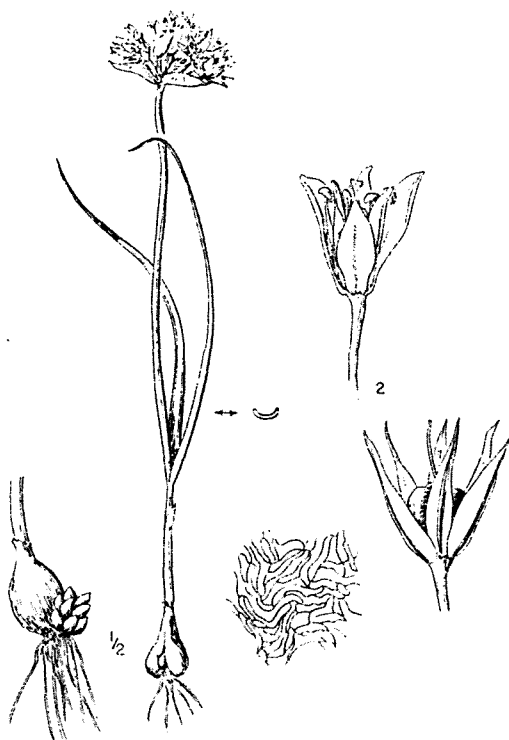
Flowers many in umbel-type head, bracts 2; perianth segments 6-10 mm long, lanceolate, obtuse to acuminate, entire, white with green midribs or pink. Ovary crestless or with 3 low processes.

PHENOLOGY: Flowers June-July

HABITAT: Moist soils, seasonally wet meadows at mid to high elevation.

LOCATION AND YEAR COLLECTED: Ochoco NF, 1980





A. madidum

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Silene nuda ssp. *insectivora*

Caryophyllaceae

Fringed Campion

Pink Family

Perennial, very glandular-pubescent, stems erect, up to 8 dm tall, bearing a taproot.

Stems branching, each branch terminating in an inflorescence, glandular-pubescent.

Leaves mostly basal, 8-18 cm long, lance-shape, pointed on end, narrowing at base to a long winged petiole, upper leaves few, reduced in size and sessile.

Flowers arranged in a narrow, few-flowered head, erect, 15-18 mm long, petals deep red or purple; capsule round, sessile.

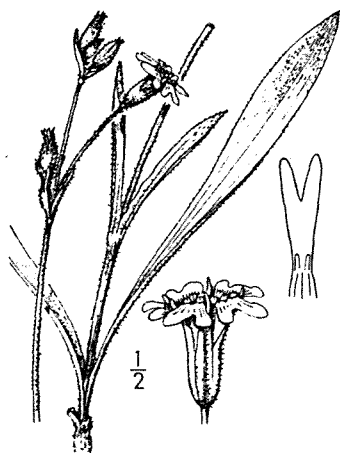
PHENOLOGY: Flowers June-August

HABITAT: Dry mountain slopes and dry meadow-like vegetation at low elevation.



LOCATION AND
YEAR COLLECTED:
Fremont NF, 1982

MANAGEMENT:
Plants of low
palatability
due to hairs
that are gland-
tipped.



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Calochortus longebarbartus
var. *longebarbartus*

Long-Bearded Mariposa Lily

Liliaceae

Lily Family

Perennial, stem erect up to 3 dm tall, usually with a bulblet in the axil of the narrow, nearly basal, stem leaf.

Basal leaf flat, 2-3 dm long and 5-10 mm broad, tapering to both ends.

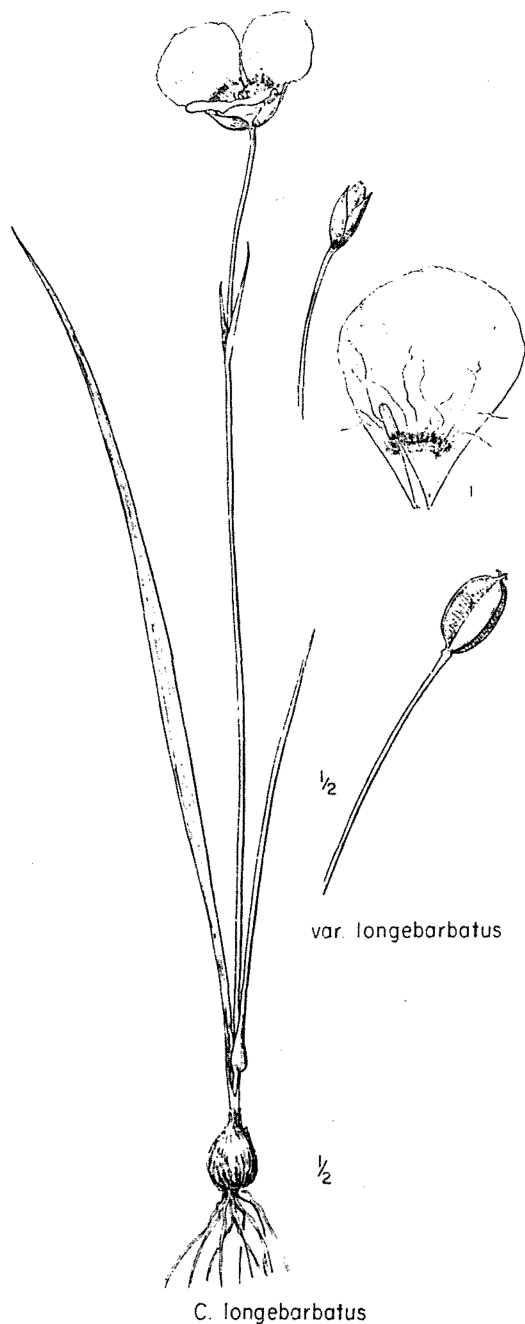
Flowers lavender-pink with a deep purplish-red band on each petal just above the gland. Flowers fertile and narrowed toward base.

PHENOLOGY: Flowers June-July

HABITAT: Low-elevation dry-tending meadows.

LOCATION AND YEAR COLLECTED: Winema NF, 1982;
Fremont NF, 1982





var. longebarbatus

C. longebarbatus

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Calochortus longebarbartus
var. *peckii*

Long-Bearded Mariposa Lily

Liliceae

Lily Family

Perennial, stem erect up to 3 dm tall, usually with a bulblet in the axil of the narrow, nearly basal, stem leaf.

Basal leaf flat, 2-3 dm long and 5-10 mm broad, tapering to both ends.

Flowers lavender-pink with a deep purplish red band on each petal just above the gland. Flowers sterile with broad-based, cup-shaped flowers.

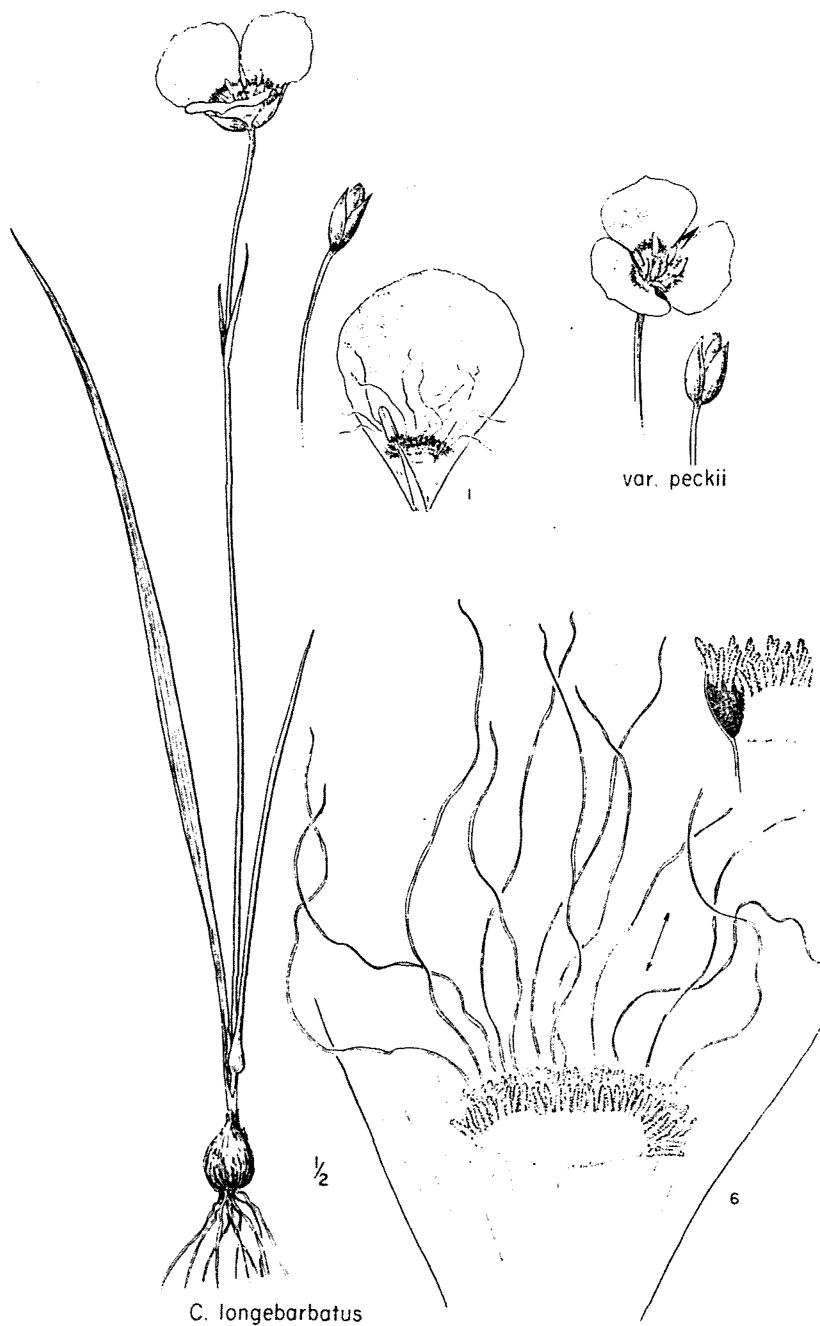
PHENOLOGY: Flowers June-July

HABITAT: Low elevation dry-tending meadows

LOCATION AND YEAR COLLECTED: Ochoco NF, 1981

MANAGEMENT: Most populations found in areas where grazing permitted.





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Allium campanulatum

Liliaceae

Sierra Onion

Lily Family

Perennial, flowering stem round, usually solitary (2 or more stems may develop), up to 3 dm tall. Bulbs at base of stem round, either a cluster or short-stalked bulblets or filiform rhizome up to 1 dm long.

Leaves 2 generally, 1-10 mm broad, about as long as flowering stem and withering at flowering.

Flowers in few-flowered head, and recurved in fruit.

Flowers with a purple crescent at base, rarely white.

PHENOLOGY: Flowers June-July

HABITAT: Dry soils at mid to higher elevations.

LOCATION AND YEAR COLLECTED: Deschutes NF, 1927; Fremont NF, 1980; Ochoco NF, 1980





A. campanulatum

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Astragalus peckii

Leguminosae

Peck's Milkvetch

Pea Family

Perennial, with grayish-appressed hairs; long taproot and very freely branching crown with many erect stems up to 2.5 dm tall.

Leaves 3-4 cm long; stipules membranous, 1-2 cm long; leaflets 7-13 per compound leaf.

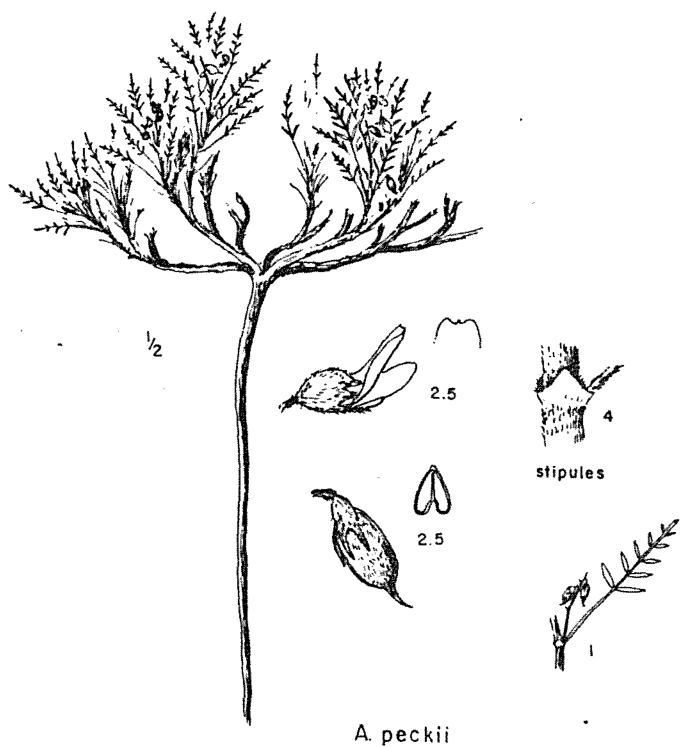
Flowers in racemes loosely 5 to 9-flowered, flowers 4-6 mm long, cream, often covered with fine bluish hair. Pod sessile, 4-6 mm long, hairy.

PHENOLOGY: Flowers July-August

HABITAT: Sandy soil, often on deep pumice.

LOCATION AND YEAR COLLECTED: Deschutes NF, 1980;
Winema NF, 1943





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Astragalus howellii var.
howellii

Howell's Milkvetch

Leguminosae

Pea Family

Grayish, soft, and somewhat crisp-strigillose perennial from a taproot, branched crown, with several prostrate to erect stems, 5-20 cm long, not connate.

Leaves 5.5-14 cm long, with mostly 21-27 leaflets, these pubescent above; peduncles mostly 8-18 cm long; racemes 10-25 flowered; calyx 5-7.5 mm long; corolla yellowish-white, banner 10-15.5 mm long; stipe of the pod 7-14 mm long.

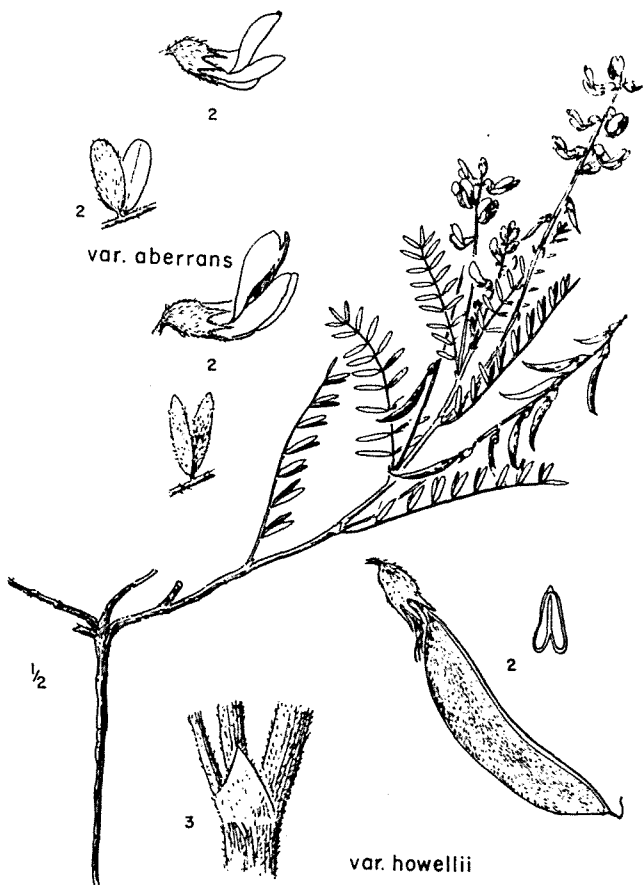
PHENOLOGY: Flowers April-June

HABITAT: Sagebrush planes and foothills near ponderosa pine forests.

LOCATION AND YEAR COLLECTED: Ochoco NF, 1982

MANAGEMENT: Growing on extensively grazed rangelands associated with abundant cheatgrass.





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Lupinus cusickii ssp.
brachypodus
Cusick's Lupine

Leguminosae

Pea Family

Perennial from profusely branching, matted clump, up to 3 dm in diameter, 12-15 cm tall, softly hairy.

Leaflets 6-7, broadest toward tips, pointed, 8-21 mm long, stipules 10-15 mm long.

Flowering stems longer than leaves, 2-3.5 cm long, compact or almost head-like; calyx 4-5 mm long; petals blue and yellow, about 9.5-12 mm long; fruits mostly woody, 6-11 mm long.

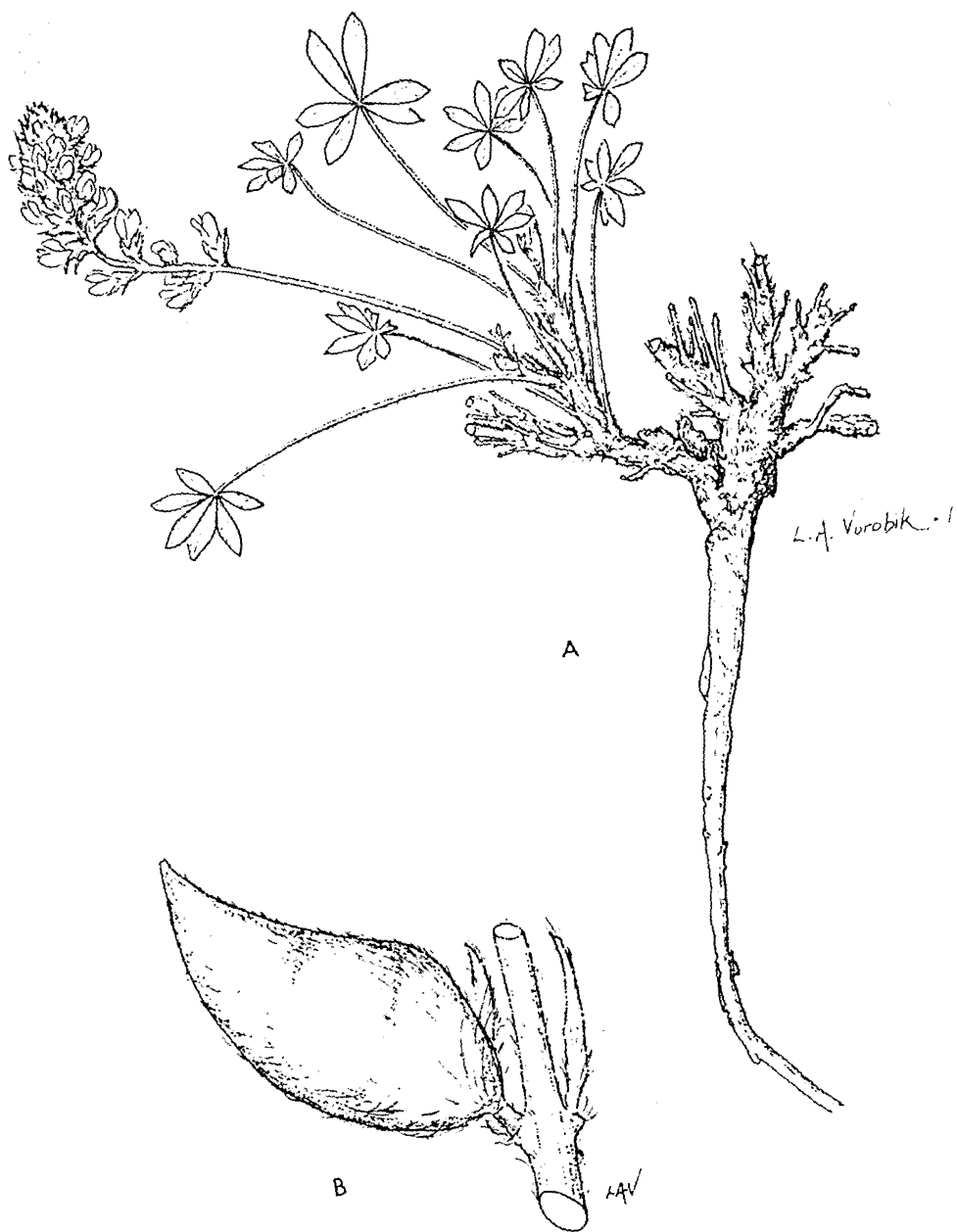
PHENOLOGY: Flowers June-July

HABITAT: Sagebrush or sage/juniper associations

LOCATION AND YEAR COLLECTED: Ochoco NF, 1982

MANAGEMENT: All known sites should be excluded from any disturbance.





Lomatium peckanum

Umbelliferae

Peck's Lomatium

Parsely Family

Plants essentially with no definable stem, up to 3 dm tall, glabrous and minutely roughened, from a slender taproot.

Leaves oblong to linear, 1-18 mm long, divided into 3's, then 1-2 ternate; leaflets rather remote and deeply toothed or parted.

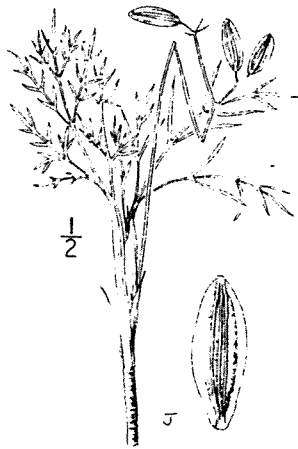
Flower petals unknown; fruits oblong-oval, 2-15 mm long, granulate-roughened to glabrate, wings less than half as wide as body.

PHENOLOGY: Flowers April-July

HABITAT: Dry hillsides, probably associated with sagebrush, near Bly, Oregon.

LOCATION AND YEAR COLLECTED: Fremont NF, 1927





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Allium bisceptrum

Liliaceae

Two-Stemmed Onion

Lily Family

Perennial, flowering stem up to 4 dm tall, round, often with 2 or more arising from ovoid bulbs. Leaves present at flowering, 2 or more per bulb, channeled, concave-convex in cross section, 1-13 mm broad and usually shorter than the stem.

Flowers 7-10 mm long, lanceolate, acuminate, and entire, lilac or pale pink to white.

Ovary conspicuously crested with 6 flattened small bumpy processes.

PHENOLOGY: Flowers June-July

HABITAT: Meadows and aspen groves, less frequently on open slopes.

LOCATION AND YEAR COLLECTED: Fremont NF, 1973;

Ochoco NF, 1939;
Winema NF, 1982





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Allium bisceptrum

Oryzopsis hendersonii

Gramineae

Henderson's Ricegrass

Grass Family

Strongly tufted perennial, clumps semi-solid and round, up to 4 dm tall.

Sheaths with fine small hairs; ligules with fine small hairs externally, longer on side; lower ligules to 0.5 mm long, upper ones to 1 mm long.

Leaves strongly inrolled, erect, barely 1 mm broad.

Flowering area 4-12 cm long, often partially included in the sheath, narrow; glumes obtuse, 5 nerved, the first 4-5 mm long, the second 4.5-5.5 mm long, lemma about equalling the glumes, glabrous, becoming olive or brown, the awn pubescent, 6-10 mm long, soon deciduous.



PHENOLOGY:

Flowers
May-June

HABITAT:

Dry, rocky,
shallow soil in
sagebrush or
ponderosa pine.

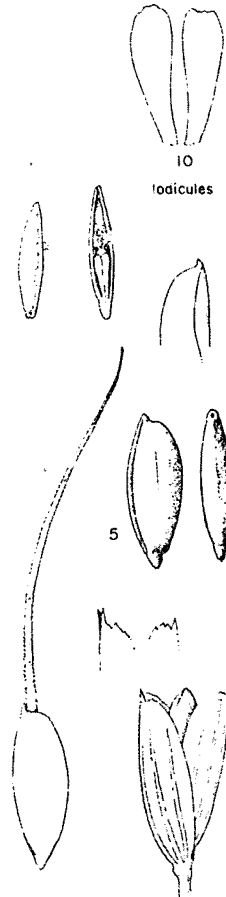
LOCATION AND
YEAR COLLECTED:
Ochoco NF, 1980

MANAGEMENT:

Restrict graz.
on known sites.



Oryzopsis hendersonii



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Collomia macrocalyx

Polemoniaceae

Bristle-Flower Collomia

Phlox Family

Erect annual up to 10 cm tall; stems branched. Lower leaves petioled with elliptic blades; upper long-lance shaped, 15-35 mm long, sub-sessile, puberulent.

Flowers sessile or nearly so in dense heads; bracts leafy, linear and much exceeding the flowers and longer than stem leaves; calyx 8-10 mm long and gray hairy; corolla funnel-shaped, 8-10 mm long, purplish (when dry); capsule equal to calyx-tube.

PHENOLOGY: Flowers June

HABITAT: Dry, open rocky ridges at moderate elevations.

LOCATION AND YEAR COLLECTED: Ochoco NF, 1980

MANAGEMENT: Exclude grazing animals from known sites.





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Salix bebbiana

Salicaceae

Bebb's Willow

Willow Family

Many-stemmed shrub up to 4 m tall, stems up to 1.5 cm thick.

Young twigs slightly hairy to densely villous; stipules inconspicuous.

Leaves deep green above, more or less glaucous beneath; somewhat hairy when young and glabrous when mature, 4-8 cm long and 1.5-3 cm wide.

Flowers inconspicuous, male catkins 1.2-2 cm long and female aments 1-2 cm long.

PHENOLOGY: Flowers April-May

HABITAT: Streambanks from lowlands to moderate elevation in the mountains.

LOCATION AND YEAR COLLECTED: Ochoco NF, 1980

MANAGEMENT: Known sites should be protected from grazing animals.





S. bebbiana

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Hieracium bolanderi

Compositae

Bolander's Hawkweed

Sunflower Family

Perennial up to 3 dm tall, stem glabrous and covered with a wax-like substance, solitary or few stems from a woody caudex, unbranched below inflorescence. Leaves 1.5-7 cm long, sessile, thin, entire or slightly toothed with abundant hairs.

Stems usually solitary, terminating in a branched inflorescence with 3-10 heads, glabrous with 5-10 flowers in each head, pale yellow, rarely white.

PHENOLOGY: Flowers June-July

HABITAT: Forested or open areas in mounains.

LOCATION AND YEAR COLLECTED: Deschutes NF, 1975;
Winema NF, 1916

**NO PHOTO
AVAILABLE**



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Calamagrostis breweri

Gramineae

Brewer's Reedgrass

Grass Family

Perennial, tufted, glabrous, up to 3 dm tall.

Stems unbranched except in inflorescence.

Leaves tufted at base of plant, round; ligule
0.5-1.5 mm long, rounded.

Panicle 3-8 cm long, from rather narrow to open, dark
purple; glumes 3.3-4 mm long and keeled above; lemma
3-4 mm long, shallowly 4-toothed above, awned from
near the base, the awn twisted and bent.

PHENOLOGY: Flowers July-August

HABITAT: Streambanks, lake margins, moist
subalpine to alpine meadows.

LOCATION AND YEAR COLLECTED: Deschutes NF, 1946

NO PHOTO
AVAILABLE



Calamagrostis breweri

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Gentiana newberryi

Gentianaceae

Newberry's Gentian

Gentian Family

Dwarf alpine plant, with perennial taproot and one to several more or less reclining flowering stems 4-15 cm tall.

Basal leaves forming a rosette, 2-7 cm long, 4-12 mm broad, lower stem leaves similar but smaller, upper sessile, 10-15 mm long.

Flowers solitary, sessile in the axil of the uppermost pair of leaves; corolla broadly funnelform, white within and dotted with greenish spots, lobes 5-8 mm, pale blue to deep violet, tube beneath the lobes often greenish purple or greenish brown; tubes 2-3 cm long.

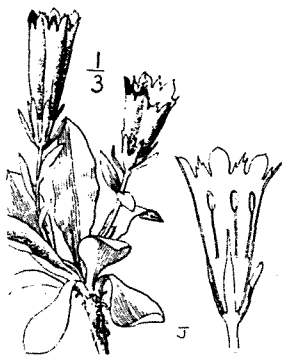
PHENOLOGY: Flowers August-September

HABITAT: Alpine or subalpine meadows

LOCATION AND YEAR COLLECTED: Deschutes NF, 1980

MANAGEMENT: Trampling by livestock detrimental to plants in moist to wet sites.





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Claytonia umbellata

Portulacaceae

Umbellate Spring Beauty

Purslane Family

Glabrous perennial with deep growing round corms or fleshy roots.

Basal leaves 1 to many, stem leaves 2, opposite, under the inflorescence, 2.5-7 cm long, sessile or very short petioled.

Flower terminal, racemose, 1-2 bracts at base of raceme, perfect, regular.

Petals 5-6, variable in width, pink, white, or yellowish; stamens 5; capsule ovate.

PHENOLOGY: Flowers June-July

HABITAT: Exposed slopes at mid-elevation in Cascades.

LOCATION AND YEAR COLLECTED: Deschutes NF, 1976





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Collomia mazama

Polemoniaceae

Mount Mazama Collomia

Phlox Family

Few to many-stemmed perennial from slender taproot, up to 3 dm tall.

Stems many and glandular hairy, strong scented.

Leaves petioled, coarsely serrate-toothed above, entire below.

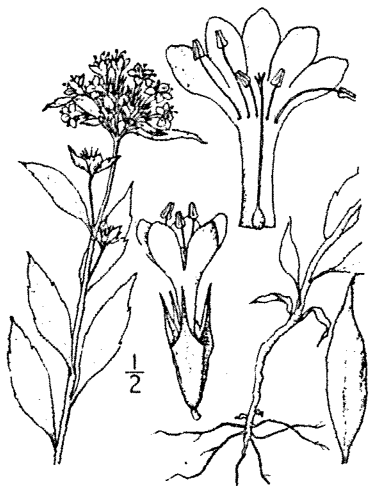
Flowers congested in terminal heads; calyx 7-9 mm long; corolla funnel-shaped 10-15 mm long, deep blue to violet; capsule equal to calyx-tube.

PHENOLOGY: Flowers July-August

HABITAT: High elevation on dry, rocky sites.

LOCATION AND YEAR COLLECTED: Winema NF, 1980





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Elmera racemosa var.
puberulenta
Elmera

Saxifragaceae

Saxifrage Family

Perennial, petioles and lower stems glandular-pubescent, petioles with few long stiff hairs, up to 2.5 dm tall.

Basal leaves kidney-shape, 3-5 cm broad, much broader than long; stipules large, membranous, brownish.

Flowers 10-35 in loosely flowered racemes; bracts small, brownish; calyx greenish-yellow; inflorescence sometimes with long hairs as well as glandular hairs.

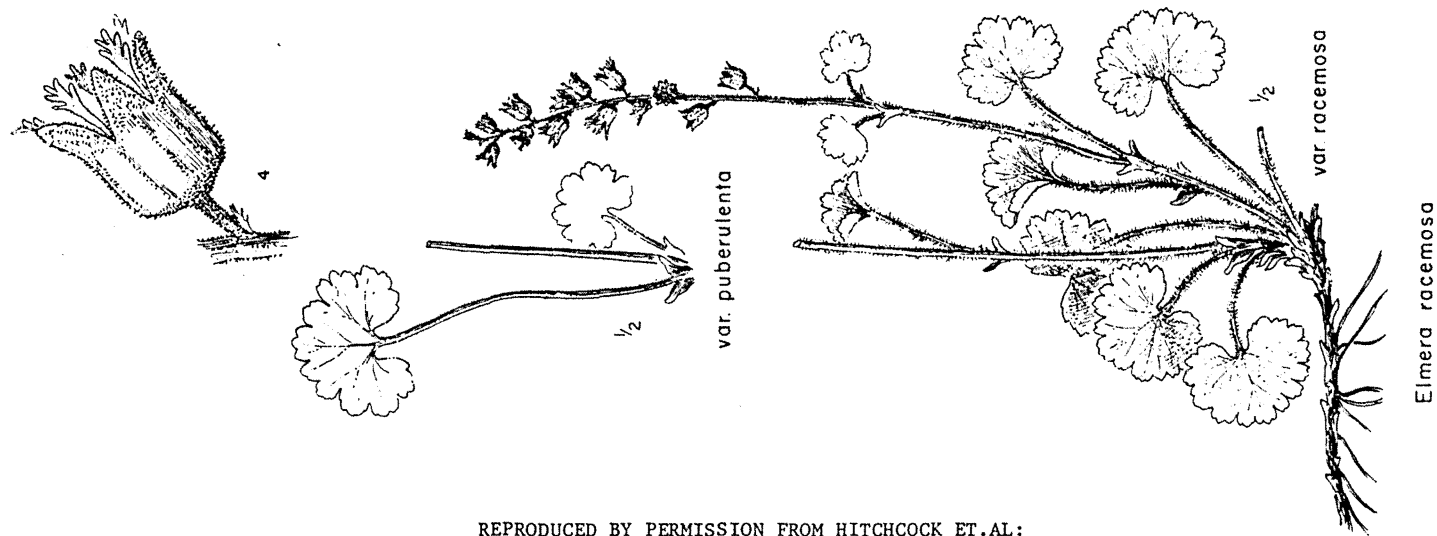
PHENOLOGY: Flowers June-August

HABITAT: Rock crevices and on rocky ledges and talus slopes, montane to subalpine.

LOCATION AND YEAR COLLECTED: Deschutes NF, 1980;

Winema NF, 1980





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Melica stricta

Gramineae

Nodding Melica

Grass Family

Perennial, up to 40 cm tall, base of plant somewhat thickened but not bulbous.

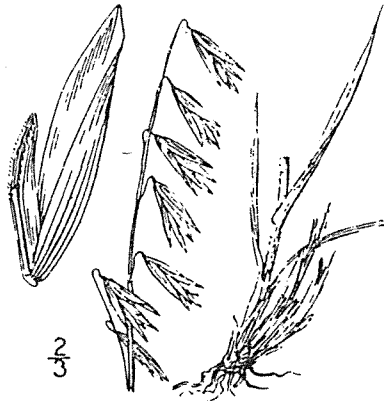
Panicle narrow few-flowered; spikelets large, 12 mm long, reflexed on rather delicate pedicles; glumes nearly as long as the spikelet, longer than the lower lemma; lemma scabrous, obtuse, awnless.

PHENOLOGY: Flowers June-July

HABITAT: Rocky slopes at high elevation in south Warner Mountains.

LOCATION AND YEAR COLLECTED: Fremont NF, 1982





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Allium platycaule

Liliaceae

Broad-Stemmed Onion

Lily Family

Perennial, with flowering stem up to 15 cm tall, arising from an ovoid bulb 2-2.5 cm long.

Leaves usually 2 exceeding the flowering stem, 10-20 mm broad.

Flowers rose-colored 10-14 mm long with narrow pointed segments; anthers purple, exceeding flower parts.

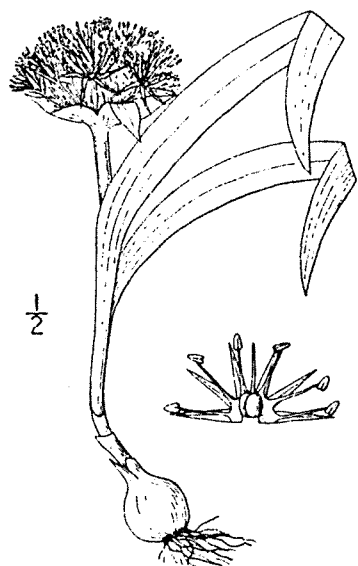
PHENOLOGY: Flowers June-July

HABITAT: Subalpine meadows or high open sites in mountains.

LOCATION AND YEAR COLLECTED: Fremont NF, 1980

MANAGEMENT: No serious threats to existing population except for road construction or grazing animals.





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Aster gormanii

Compositae

Gorman's Aster

Sunflower Family

Perennial with glandular hairs on sessile leaves; up to 3 dm tall arising from a rhizome.

Leaves reduced below, entire, mostly 1.5-3 cm long and 3-10 mm wide.

The singular stems with solitary heads or sometimes 2-4 heads. Ray flowers 8-13 in number, white or pinkish about 1 cm long; bracts green tipped, sharp pointed.

PHENOLOGY: Flowers in August

HABITAT: Cliffs and open rocky ridges in high Cascades.

LOCATION AND YEAR COLLECTED: Deschutes NF, 1935





A. gormanii

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Erigeron cascadensis

Compositae

Cascade Daisy

Sunflower Family

Perennial from a thick branching woody-like caudex, up to 2 dm tall, mainly glabrous or with a few scattered glands and/or spreading hairs.

Leaves 2.3-9 cm long, 5-17 mm wide, entire, sessile.

Stems essentially nonbranched with heads mostly solitary with yellow disc and white ray flowers; bracts green glandular viscid.

PHENOLOGY: Flowers June-July

HABITAT: Scattered sites on rock summits of central Cascades.

LOCATION AND YEAR COLLECTED: Deschutes NF, 1981





E. cascodensis

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Arnica viscosa

Compositae

Shasta Arnica

Sunflower Family

Perennial with numerous freely branched stems covered with gland-tipped hairs of varying length; up to 5 dm tall, growing in clumps.

Leaves sessile and arranged in opposite pairs along stems, 2-5.5 cm long and 1.2 cm wide, entire; lower leaves reduced, bract-like.

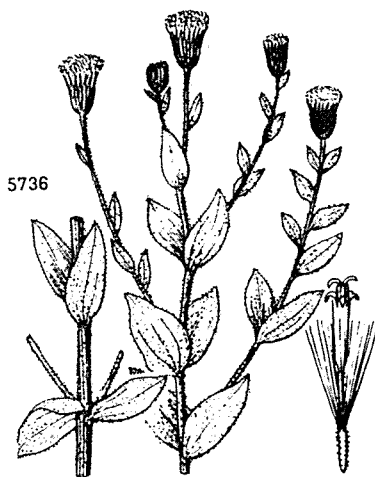
Flowering stems with several or many flower heads of small, pale yellow disc-flowers, no petal-like flowers. Bracts glandular-hairy.

PHENOLOGY: Flowers in August

HABITAT: Rocky places, scree and talus slopes near or above timberline.

LOCATION AND YEAR COLLECTED: Deschutes NF, 1980





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Smelowskia ovalis var.
ovalis

Cascade Smelowskia

Cruciferae

Mustard Family

Perennial with branching woody base, up to 15 cm tall. Stems simple and unbranched, more or less grayish with a mixture of soft, fine, branched hairs. Basal leaves many, 2.5-7 cm long and divided into small parts covered with branched hairs and longer unbranched hairs; stem leaves several, reduced. Flowers white or tinged with purple, 4-5 mm long. Fruit erect, glabrous, and slightly round, 3-6 mm long.

PHENOLOGY: Flowers June-August

HABITAT: Rocky crevices and subalpine to alpine moraines, ridges, and talus.

LOCATION AND YEAR COLLECTED: Deschutes NF, 1976





Smelowskia ovalis

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Arabis suffrutescens var.
horizontalis

Cruciferae

Crater Lake Rockcress

Mustard Family

Perennial, stems clustered, up to 3 dm tall, leaves hairy below but glabrous and waxy-like above.

Leaves lance shape with basal leaves 1-4 cm long, including petioles.

Flowers white or pink, petals 4-5 mm long.

Fruits (silicles) hanging 4-7 cm long and glabrous.

PHENOLOGY: Flowers July-August

HABITAT: Dry high elevation slopes around Crater Lake National Park.

LOCATION AND YEAR COLLECTED: Winema NF, 1946

NO PHOTO
AVAILABLE



L. Vorobik 7x

Draba aureola

Cruciferae

Golden Alpine Draba

Mustard Family

Short-lived perennial or biennial up to 15 cm tall, hairy with coarse, simple and branched hairs. Stems usually single, sturdy, basally several-branched (simple) stems.

Leaves numerous, oblong 10-26 mm long, 2-4 mm broad, mostly in thick often withering and persistent cushions and closely crowded on the lower portion of the flowering stem.

Flowers dense at top of stems, yellow, about 4.5 mm long. Fruits (silicles) 11-15 mm long, 3-6 mm broad with coarsely branched hairs.

PHENOLOGY: Flowers June-August

HABITAT: Open slopes usually above timberline.



LOCATION AND
YEAR COLLECTED:
Deschutes NF,
1980



Draba aureola

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Botrychium pumicola

Ophioglossaceae

Oregon Grape-Fern

Adder's-Tongue
Family

Perennial, stout and fleshy up to 2.5 dm tall.

Rhizome erect, stout, elongate 2-8 cm long.

Fronds one or two, erect, 6-14 cm long; the main stalk below ground 4-9 cm long, thickly sheathed with stems of old fronds.

Sterile blade waxy coated, sessile, triangular, 2-4 cm long and 1.5-4 cm broad, divided with the middle division being the largest.

Nonflowering plant, reproducing by spores. Fertile stalk with tip recurved, sessile or short-stalked and surpassing the sterile blade.

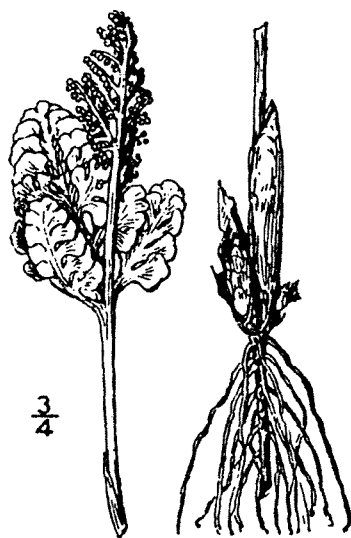
PHENOLOGY: Sporulates in August

HABITAT: Coarse to fine pumice gravel on high, exposed ridges in mountains.

LOCATION AND YEAR COLLECTED: Deschutes NF, 1982

MANAGEMENT: Very sensitive to foot or vehicle traffic; collecting must be prohibited.





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Silene suksdorfii

Caryophyllaceae

Suksdorf's Silene

Pink Family

Tufted perennial with a branching base up to 1.5 dm tall.

Stems numerous, unbranched, erect or slightly decumbent at base, fine hairs become glandular above.

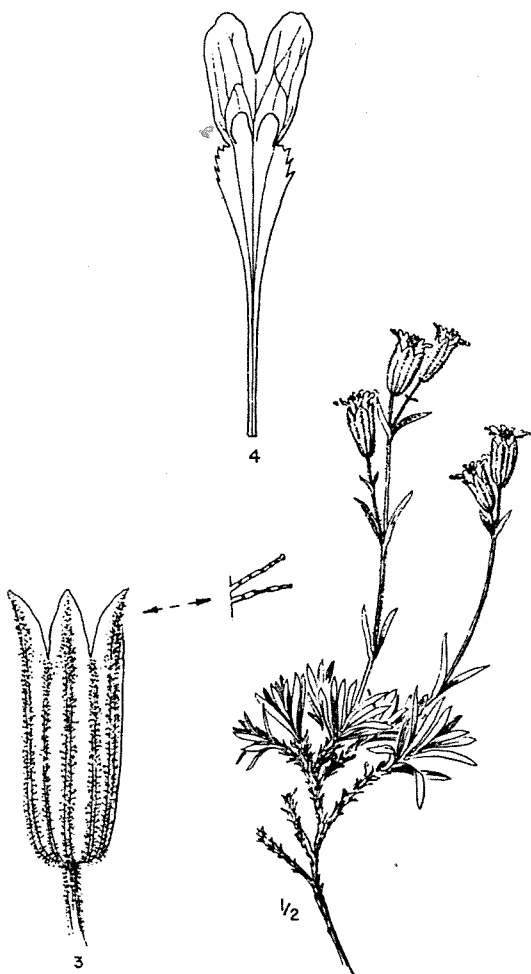
Basal leaves numerous, linear, 1-2 cm long, 1.2-2 mm broad, pubescent, sometimes glandular, sessile; leaves on stem similar, usually only 1 or 2 pairs. Flowering heads 2-5 flowered; flowers finely glandular-pubescent, the hairs multicellular, white or greenish or lavender-tinged.

PHENOLOGY: Flowers June-August

HABITAT: Alpine and subalpine slopes, often on talus.



LOCATION AND
YEAR COLLECTED:
Deschutes NF,
1980, Winema
NF, 1897



Silene suksdorfii

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Strix occidentalis

Strigidae

Spotted Owl

Owl Family

ADULT: A medium-sized owl 1½-2 feet long. Round-headed, fluffly, with no visible ear tufts. Visible spotting and bars on belly. Only large owl with brown eyes; easily approached.

VOICE: Two or three short hoots followed by louder, more prolonged hooo-ah.

HABITAT: Old growth Douglas-fir, white fir, and mixed species forestland.

OREGON DISTRIBUTION: West side of Cascade crests, occasionally to east slopes of Cascades.

NESTING: Two or three white eggs in tree cavity, cave in canyon wall, or abandoned hawk nest.

MANAGEMENT: Road access to mature old-growth forests has been followed by disappearance of this owl.

Larger horned owls move in to these preferred sites by the spotted owl.

LOCATION AND SEASON: Deschutes NF, R; Winema NF, R.
(R = Resident)



Haliaeetus leucocephalus

Accipitridae

Bald Eagle

Hawk Family

ADULT: Very large bird $2\frac{1}{2}$ - $3\frac{1}{2}$ feet tall with a 6 to 8 foot wingspan. Plumage very dark brown with white head and tail. Immature birds are brown mottled with white, especially under wings and at base of tail. Bare legs.

VOICE: Thin, weak, chittering noise.

HABITAT: Near lakes and rivers.

OREGON DISTRIBUTION: Somewhat common winter and summer resident throughout Oregon near water.

NESTING: One to three white eggs in large stick nests in tall mature trees, especially ponderosa pine, near water.

MANAGEMENT: Protect from hunting and provide areas suitable for development of old growth ponderosa pine nest trees.

LOCATION AND SEASON: Deschutes NF, R; Fremont NF, R; Ochoco NF, M; Winema NF, R. (R = Resident; M = Migrant)



Falco peregrinus

Falconidae

Peregrine Falcon

Falcon Family

ADULT: Large falcon about $1\frac{1}{2}$ feet long and a 3-4 foot wingspan. Slate gray back and pale buff breast with bars and spots. White throat and barred tail. Dark skull cap extends below eyes. Long pointed wings and long narrow tail.

VOICE: Silent or shrill kek-kek-kek.

HABITAT: Open country.

OREGON DISTRIBUTION: Rarely sighted in eastern Oregon. Occasional sightings from Crater Lake and Lower Deschutes River, Blue Mountains.

NESTING: Two - four darker-flecked reddish eggs in stick nests on remote cliffs and cutbanks.

MANAGEMENT: Pesticides have brought this bird to near extinction.

LOCATION AND SEASON: Deschutes NF, M; Fremont NF, M; Ochoco NF, M; Winema NF, M. (M = Migrant)



Charadrius alexandrinus

Charadiidae

Snowy Plover

Plover Family

ADULT: Small sandpiper-size bird. White belly, gray back, white wing patches, black legs, small black bill, incomplete breast band, with a small black mark behind the eye.

VOICE: Low-pitched krut or whistled ku-wheat.

HABITAT: Sandy or alkine shores or flats.

OREGON DISTRIBUTION: Coast from Coos Bay to Astoria, occasional to interior lake basins.

NESTING: Three buff, spotted eggs in smoothed area on the ground.

MANAGEMENT: Beach areas need to be protected from disturbance by bathers, hikers, and ORV's.

LOCATION AND SEASON: Deschutes NF, SR; Fremont NF, SR; Wimena NF, SR. (SR = Summer Resident)



Numenius americanus

Scolopacidae

Long Billed Curlew

Sandpiper Family

ADULT: A large shorebird $1\frac{1}{2}$ -2 feet long. Buff brown color with bright cinnamon wing linings. No visible crown stripes. Long downcurved bill (7-8"). Gray-blue legs, long neck.

VOICE: Loud cur-lee, often followed by kli-li-lili-lili.

HABITAT: Marshes, beaches, and mud flats.

OREGON DISTRIBUTION: East of the Cascades commonly associated with wet zones in the steppe. Common in the Boardman area.

NESTING: Four olive eggs spotted with brown and lavender in a grass-lined depression on open well-drained ground above water.

MANAGEMENT: Protect shorelines, but do not allow tall coarse vegetation or shrubs to develop as curlews feel safe only in open.

LOCATION AND SEASON: Deschutes NF, M; Fremont NF, SR; Ochoco NF, SR; Winema NF, SR. (SR = Summer Resident; M = Migrant)



Buteo regalis

Accipitradae

Ferruginous Hawk

Hawk Family

ADULT: Large hawk about 2 feet long and with a $4\frac{1}{2}$ foot wingspan. Broad, rounded wings and tail. Rufous (reddish) black and whitish below, whitish head. Dark phase (rare) rufous above and below. Leg feathered to foot.

VOICE: Loud descending kre-ah or gull-like krag.

HABITAT: Plains and open woodlands.

OREGON DISTRIBUTION: Rare in eastern Oregon range-lands.

NESTING: Three to five white blotched eggs in a large nest of sticks, brush, and roots in juniper or rimrocks.

MANAGEMENT: Suitable nesting sites are scarce and should be protected.

LOCATION AND SEASON: Deschutes NF, SR; Fremont NF, SR; Ochoco NF, SR; Winema NF, SR. (SR = Summer Resident)



Buteo swainsoni

Accipitradae

Swainson's Hawk

Hawk Family

ADULT: Large hawk $1\frac{1}{2}$ - 2 feet long and with a $4-4\frac{1}{2}$ foot wingspan. Broad rounded wings and tail. Dark brown back, whitish below with a dark breastband. Dark flight feathers contrast with whitish wing linings. Dark phase has uniformly dark body and wings.

VOICE: Usually silent.

HABITAT: Plains, foothills, and meadows.

OREGON DISTRIBUTION: Occasional in eastern Oregon, usually associated with rangelands.

NESTING: Two - four bluish or white, often spotted eggs in a stick nest on a tree, bush, cliff, or bare ground.

MANAGEMENT: Protect nesting areas.

LOCATION AND SEASON: Deschutes NF, SR; Fremont NF, SR; Ochoco NF, SR; Winema NF, SR. (SR = Summer Resident)



Gulo luscus

Mustelidae

Wolverine

Weasel Family

ADULT: Head and body about 2½ feet long; bushy tail 6-9 m long; weight 30 to 60 pounds. Dark brown with 2 broad yellowish stripes from shoulders to rump. Feet appear overlarge for its size.

HABITAT: Remote subalpine forest and alpine areas.

OREGON DISTRIBUTION: Once thought extinct in Oregon, it is recently confirmed from several locations in eastern Oregon.

DENS: Rock crevices or beneath tallus.

MANAGEMENT: Populations should be protected from hunting or trapping.

LOCATION AND SEASON: Deschutes NF, R; Ochoco NF, R; Winema NF, R. (R = Resident)



APPENDIX I

SOURCE LIST FOR R-6 SENSITIVE PLANTS *

s = Suspected

x = Documented Occurrence

	<u>Des</u>	<u>Fre</u>	<u>Och</u>	<u>Win</u>
1. <i>Agoseris elata</i>	x			
2. <i>Allium bisceptrum</i>	s	x	x	s
3. <i>Allium bolanderi</i>				s
4. <i>Allium brandegei</i>			s	
5. <i>Allium campanulatum</i>	x	x	x	s
6. <i>Allium madidum</i>			s	
7. <i>Allium platycaule</i>		x		
8. <i>Allium pleianthum</i>	s		s	
9. <i>Arabis suffrutescens</i>				
var. <i>horizontalis</i>	s			x
10. <i>Arnica viscosa</i>	x			s
11. <i>Artemisia ludoviciana</i>				
var. <i>estesii</i>	s		s	
12. <i>Asarum caudatum</i>				
var. <i>viridiflorum</i>				x
13. <i>Aster gormanii</i>	x			
14. <i>Astragalus applegatei</i>		s		s
15. <i>Astragalus hoodianus</i>			s	
16. <i>Astragalus howellii</i>				
var. <i>howellii</i>			x	
17. <i>Astragalus peckii</i>	x			x
18. <i>Astragalus tegetarioides</i>	x		s	
19. <i>Botrychium pumicola</i>	x			s
20. <i>Botrychium simplex</i>		x	x	
21. <i>Calamagrostis breweri</i>	x			
22. <i>Calochortus longebarbartus</i>				
var. <i>longebarbartus</i>	s	x		x
23. <i>Calochortus longebarbartus</i>				
var. <i>peckii</i>			x	
24. <i>Campanula scabrella</i>	s			s
25. <i>Carex limnophila</i>		s		
26. <i>Castilleja chlorotica</i>	x	x		s
27. <i>Cicuta bulbifera</i>				s
28. <i>Claytonia umbellata</i>	x			
29. <i>Collomia macrocalyx</i>			x	
30. <i>Collomia mazama</i>				x
31. <i>Cympotenus bipinnatus</i>	s			

	<u>Des</u>	<u>Fre</u>	<u>Och</u>	<u>Win</u>
32. <i>Cypripedium calceolus</i> var. <i>parviflorum</i>		s		
33. <i>Cypripedium montanum</i>	s		x	x
34. <i>Dicentra formosa</i> ssp. <i>formosa</i>				x
35. <i>Draba aureola</i>	x			s
36. <i>Elmera racemosa</i> var. <i>puberulenta</i>	x			x
37. <i>Erigeron cascadiensis</i>	x			s
38. <i>Erigeron decumbens</i> var. <i>robustior</i>				s
39. <i>Eriogonum cusickii</i>		s		
40. <i>Eriogonum prociduum</i>		x		
41. <i>Erythronium klamathense</i>				x
42. <i>Gentiana newberryi</i>	x			
43. <i>Haplopappus whitneyi</i> ssp. <i>discoideus</i>				s
44. <i>Hemitomes congestum</i>	x			
45. <i>Hieracium bolanderi</i>	x			x
46. <i>Lilium parvum</i>	s			
47. <i>Lobelia dortmanna</i>	x			
48. <i>Lomatium cusickii</i>			s	
49. <i>Lomatium laevigatum</i>			s	
50. <i>Lomatium peckianum</i>		s		s
51. <i>Lupinus biddlei</i>			s	
52. <i>Lupinus cusickii</i> ssp. <i>brachypodus</i>	s		x	
53. <i>Lycopodium annotinum</i>	x			
54. <i>Melica stricta</i>		x		
55. <i>Mimulus jepsonii</i>	s			s
56. <i>Mimulus tricolor</i>		x		x
57. <i>Monardella purpurea</i>		s		
58. <i>Myosurus sessilis</i>	s			
59. <i>Nama lobbi</i>	s			x
60. <i>Nemacladus capillaris</i>				s
61. <i>Ophioglossum vulgatum</i>	s			

	<u>Des</u>	<u>Fre</u>	<u>Och</u>	<u>Win</u>
62. Orthocarpus cuspidatus				s
63. Oryzopsis hendersonii			x.	
64. Penstemon glaucinus		x		
65. Penstemon peckii	x			
66. Perideridia erythrorhiza				x
67. Phacelia verna	s			s
68. Pilularia americana		s		
69. Plagiobothrys salsus		s		
70. Ranunculus andersonii		x	x	
71. Ribes irriguum	x			
72. Rorippa columbiae		s	s	s
73. Salix bebbiana		s	x	
74. Salix laevigata				s
75. Sarcodes sanguinea		x		
76. Sesuvium verrucosum		s		
77. Silene nuda				
ssp. insectivora		s		s
78. Silene scaposa				
var. scaposa		s	s	
79. Silene suksdorfii	x			x
80. Smelowskia ovalis				
var. ovalis	x			
81. Stylocline psilocarphoides		s		
82. Thelypodium brachycarpum		s		s
83. Vaccinium oxycoccus				
var. intermedium	x			

* Oregon R-6 Sensitive Plant List
Recommended Revisions
February, 1983

PHOTO CREDITS

Sensitive Plants:

Rich Brown:	<i>Aster gormanii</i> <i>Botrychium simplex</i> <i>Claytonia umbellata</i> <i>Hemitomes congestum</i>
Allen Chambers:	<i>Botrychium pumicola</i>
Ginny Crosby:	<i>Allium platycaule</i> <i>Calochortus longebarbartus</i> var. <i>longebarbartus</i> <i>Eriogonum prociduum</i> <i>Lomatium peckanum</i> <i>Melica stricta</i> <i>Penstemon glaucinus</i> <i>Silene nuda</i> ssp. <i>insectivora</i>
Angie Evenden:	<i>Allium campanulatum</i> <i>Calochortus longebarbartus</i> var. <i>peckii</i> <i>Cypripedium montanum</i> <i>Draba aureola</i> <i>Oryzopsis hendersonii</i> <i>Salix bebbiana</i> <i>Silene suksdorfii</i>
Herm Fitz:	<i>Erigeron cascadiensis</i>
Kate Field:	<i>Penstemon peckii</i>
Vernon Holloway:	<i>Mimulus tricolor</i>
Bill Hopkins:	<i>Nama lobbii</i> <i>Sarcodes sanguinea</i>
Lois Kemp:	<i>Allium bisceptrum</i> <i>Collomia macrocalyx</i> <i>Lycopodium annotinum</i> <i>Vaccinium oxycoccos</i> var. <i>intermedium</i>
John Kennison:	<i>Agoseris elata</i> <i>Arnica viscosa</i> <i>Astragalus peckii</i> <i>Castilleja chlorotica</i> <i>Elmera racemosa</i> var. <i>puberulenta</i> <i>Gentiana newberryi</i>

Pat Packard: *Ranunculus andersonii*
Joan Price: *Astragalus tegetarioides*
 Lupinus cusickii ssp. *brachypodus*
Joan Seevers: *Collomia mazama*
 Dicentra formosa ssp. *oregana*
 Erythronium klamathense
Jean Siddall: *Smelowski ovalis* var. *ovalis*
Carolyn Wright: *Astragalus howellii* var. *howellii*

Sensitive Animals:

Jim Anderson: *Ferruginous Hawk*
 Long-Billed Curlew
Ralph Anderson: *Bald Eagle*
U.S. Department
of Agriculture--
Forest Service: *Peregrine Falcon*
 Snowy Plover
 Spotted Owl
 Wolverine

U.S. Fish
and Wildlife
Service: *Swainson's Hawk*